

ABSTRACT

The present invention provides a composite material and a carbonized composite material having high electric conductivities and heat conductivities, in each of which nanocarbons are uniformly mixed, and a method for producing the materials. The composite material of the present invention comprises: a high polymer, in which an atomic group including a heteroatom, such as nitrogen, oxygen or sulfur, exists in a main chain or a side chain; and nonocarbons. The carbonized composite material of the present invention is produced by burning the above described composite material.